



December 6, 2019

Native Village of Kivalina
PO Box 50051
Kivalina, Alaska 99750

Attn: Millie Hawley, Tribal Administrator
Re: Proposal – Kivalina Community Master Plan
Kivalina, Alaska
Contract No. NVK 2018-IDIQ-CRW

Dear Millie,

Pursuant to your request, we are pleased to submit this fee proposal to prepare a community Master Plan. This plan will be prepared under the existing IDIQ Term Contract that we have with the Native Village of Kivalina (NVK). This document will provide a phased approach to infrastructure development to support the community's expansion to K-Hill. Additionally, this document will include an analysis of the infrastructure needs at the current community both now and during the pioneering phase of expansion.

The services included in this fee proposal are based on the Scope of Services generated by ANTHC, and will include a combination of planning, field investigations, preliminary engineering analyses and public participation. We propose to conduct 5 community meetings which will be geared to engage local stakeholders and gather crucial input and feedback.

Scope, Schedule & Deliverables

CRW proposes to perform the work in the following phases.

Phase 1 – Data Collection, Pre-Draft Plan and Public Meeting #1 – Visioning Session

Scope: Under Phase 1, we propose to collect data from various groups as it pertains to community expansion to K-Hill and infrastructure improvements at Kivalina. This includes the State and Federal Agencies, Housing Authority, Health Corporation, Regional Corporation, School District, Regional Borough and local private corporations including non-profits and businesses.

This data will be used to develop the Pre-Draft of the Master Plan. The Pre-Draft plan will include information on the project planning areas (Kivalina and K-Hill) and the land status of each area. Under this phase, we will utilize the base maps that have been generated at K-Hill for the new school site and at Kivalina for the sea level-rise analysis being prepared under a separate delivery order. These maps will be used in Phase 2 and 3 for the mapping of existing facilities in Kivalina and the layout of new townsite at K-Hill.

Schedule: Pre-Draft Plan will be submitted within 45 days of receiving NTP. Responses to review comments will be submitted within 2 weeks of receiving comments. The Meeting Summary Report will be provided within 2 weeks of the public meeting.

Deliverables: 6 hard copies of Pre-Draft Plan. Response to review comments on the Pre-Draft Plan via e-mail. Meeting Summary Report via e-mail.

Phase 2 – Community Survey, Condition Assessments & Public Meeting #2 – Community Vetting

Scope: We will perform a house-to-house survey to gather information regarding: local housing and living conditions, preferences for future community layouts and amenities including utilities, transportation, cultural and subsistence impacts, and general expansion considerations. The surveys will be used to document and incorporate local preferences in the planning process. We will also conduct a desk-top level assessment of the current conditions of facilities, trails and heavy equipment in Kivalina. We will collect the data needed to generate the housing matrix. Once the results of the survey have been compiled and the assessments completed, we will present the data to the community for vetting.

Schedule: Within 45 days of Public Meeting #1

Deliverables: House-to-House Survey Results, Assessments, and Meeting Summary Report via e-mail.

Phase 3 – Conceptual Community Layouts & Public Meeting #3

Scope: Under Phase 3, we will begin the development of conceptual townsite layouts for K-Hill. A total of 3 options will be generated for the community to review in Public Meeting #3. It is envisioned that at this meeting the community will review the options and identify their preferred layout and features of each option. This input will then be used to refine the townsite options and included for further development in the Master Plan.

Schedule: Within 45 days of Public Meeting #2

Deliverables: 22x34 plots of 3 conceptual townsite layouts, and supporting information/handouts for the different options. A Meeting Summary Report will be provided within 2 weeks of the meeting via e-mail.

Phase 4 – Draft Master Plan & Public Meeting #4

Scope: Under Phase 4, we will revise the Pre-Draft Plan to incorporate the results of the assessments and community survey from Phase 2 and we will further refine the townsite and layout from Phase 3. We will also begin the development of alternatives for maintaining power, fuel storage, housing and sanitation facilities at the existing townsite. Each alternative will be evaluated on the basis of environmental impacts, site control, construction constraints, impacts to existing infrastructure and both capital and O&M costs.

The Draft Master Plan will be presented to the community at Public Meeting #4. CRW will provide 22x34 plots of the alternatives including capital and O&M costs and a list of the advantages and disadvantages of each option. The goal of Public Meeting #4 will be to present the information and seek input and feedback for development of the final Master Plan.

Schedule: The Draft Master Plan will be submitted within 60 days of Public Meeting #3. Public Meeting #4 will be scheduled for 2 weeks after submittal of the Draft Master Plan.

Deliverables: 6 hard copies of the Draft Master Plan. Meeting Summary Report via e-mail after Public Meeting #4. An e-mailed response to review comments will be submitted within 2 weeks of receipt of comments.

Phase 5 – Final Master Plan and (final) Public Meeting #5

Scope: The Final Master Plan will be prepared under Phase 5. Review comments from the Draft Master Plan will be incorporated. The Conclusions and Recommended Alternatives section will be completed along with the Executive Summary and Construction Phasing Plan. A resolution will be drafted for NVK's review and approval. A final Public Meeting #5 will be held to present the final plan and clear NVK's path for providing a resolution accepting the Plan.

Schedule: The Master Plan will be submitted within 30 days of receiving review comments on the Draft Plan. Public Meeting #5 will be scheduled for 2 weeks after submittal of the Final Master Plan. It is expected that the NVK resolution accepting the plan will be provided within 2 week of Public Meeting #5.

Deliverables: 6 hard copies of the Master Plan. A Meeting Summary Report will also be provided.

Schedule

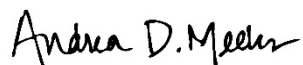
Attached is a project schedule that assumes NTP is issued on or before December 16, 2019 and that each review period is 2 weeks.

Fee

CRW proposes to complete the above described services on a time and expense basis in accordance with the terms and conditions of the IDIQ contract between CRW and the NVK. The estimated cost to complete the services is \$277,650. A breakdown of the cost is shown on the attached spreadsheet.

Please call or email me with any questions. We appreciate the opportunity to submit this proposal and look forward to working with the community.

Sincerely,
CRW Engineering Group, LLC



Andrea Meeks, PE
Project Manager/Principal Engineer


Attachments: Fee Estimate Spreadsheet (4 pages)
Schedule (1 page)

cc: Monetta Adams, Denali Commission Relocation Coordinator
Jocelyn Fenton, Denali Commission Program Manager
Jackie Qataliña Schaeffer, ANTHC Senior Project Manager

Fee Estimate Kivalina Community Master Plan December 2019	HOURS										SUBCONSULTANTS	EXPENSES	TASK SUBTOTALS	Subconsultants	
	Senior Principal - Jeff Stanley	Principal/ Project Manager - Andrea Meeks	Principal/Senior Land Surveyor - Anthony Robinson	Senior Engineer - Steven Halcomb	Project Engineer - Will Kemp	Project Engineer - Andy Horazdovsky	Registered Staff Engineer/Surveyor	Staff Engineer - Michelle Harrison	Senior Designer - Kristina Gates/Truit Smith	Clerical				Red Plains	Local Liaison/Community Survey Helper
	\$195	\$185	\$185	\$175	\$165	\$165	\$140	\$125	\$135	\$75	\$	\$	\$		
Phase 1 - Data Collection, Pre-Draft Plan & Public Meeting #1 - Visioning Session															
A. Office-Based Data Collection / Review															
1. Initial Kick-Off Meeting with ANTHC	2	2											\$760		
2. Review of available Community Data															
a. ACOE, BIA, EPA, HUD, USF&W, SHPO		2			2			4			\$1,000	\$25	\$2,328	\$1,000	
b. ADEC, ADNR, ADF&G, DCCED		2			2			4				\$25	\$1,228		
c. ADOT&PF, AEA, AVEC		2			4			4				\$25	\$1,558		
d. ANTHC & VSW		4			12			16				\$25	\$4,748		
2. Coordinate with Housing Authority		1			4			4				\$25	\$1,373		
3. Coordinate with School District		1			2			2				\$25	\$793		
4. Coordinate with Tribe & City		4			2			4				\$25	\$1,598		
5. Coordinate with Maniilaq		1			2			2				\$25	\$793		
6. Coordinate with Regional Corporation & Borough		2			4			4				\$25	\$1,558		
TASK TOTAL													\$16,733		
B. Public Meeting #1 - Visioning Session															
1. Meeting Preparation & Assistance		2			2			4	8			\$100	\$2,390		
2. Public Meeting Attendance & Notes		20						20		2		\$2,800	\$9,430		
3. Meeting Summary Report	1	2						8				\$25	\$1,593		
TASK TOTAL													\$13,413		
C. Pre-Draft Plan Preparation															
1. Executive Summary	TO BE INCLUDED IN FINAL REPORT														
2. Introduction		1			2			4				\$25	\$1,043		
3. Project Planning Areas (Kivalina & K-Hill)												\$25	\$28		
3.1 Location & Access		1			2			4				\$25	\$1,043		
3.2 History & Culture		1			2			4				\$25	\$1,043		
3.3 Environmental Conditions & Resources		2		8	2			8				\$25	\$3,128		
3.4 Economy & Financial Profile		1			2			4				\$25	\$1,043		
3.10 Public Administration		1			2			4				\$25	\$1,043		
3.11 Population		1			2			4				\$25	\$1,043		
4. Future Capital Projects	TO BE INCLUDED IN DRAFT REPORT														
5. Land Status															
5.1 Research															
a. Housing Authority, MTP, BLM & DNR			1		1			2	8			\$25	\$1,708		
b. Regional Corporation, USCG&GS/NGS & DOT			1		1			4	8			\$25	\$1,958		
c. Land Status Research		1	4		2		16	4	8		\$0	\$25	\$5,103		
5.2 Mapping (Kivalina & K-Hill)												\$100	\$110		
a. Acquire Recent Aerial Imagery (satellite)			4									\$3,500	\$4,590		
b. Prepare Project Base Map	TO BE PREPARED AS PART OF SEA LEVEL RISE INUNDATION STUDY														
c. Land Status Map			8		1				16			\$50	\$3,860		
6. Need for Projects	TO BE INCLUDED IN DRAFT REPORT														
7. Community Capacity	TO BE INCLUDED IN DRAFT REPORT														
8. Infrastructure Alternatives	TO BE INCLUDED IN DRAFT REPORT														
9. Public Participation in the Planning Process	TO BE INCLUDED IN DRAFT REPORT														
10. Conclusions and Recommended Alternatives	TO BE INCLUDED IN FINAL REPORT														
11. Pre-Draft Plan Submittal	1	1			1			2		4		\$200	\$1,315		
TASK TOTAL													\$28,053		
PHASE 1 TOTAL COST													\$58,198		

Fee Estimate Kivalina Community Master Plan December 2019	HOURS										SUBCONSULTANTS	EXPENSES	TASK SUBTOTALS	Subconsultants		
	Senior Principal - Jeff Stanley	Principal/ Project Manager - Andrea Meeks	Principal/Senior Land Surveyor - Anthony Robinson	Senior Engineer - Steven Halcomb	Project Engineer - Will Kemp	Project Engineer - Andy Horazdovsky	Registered Staff Engineer/Surveyor	Staff Engineer - Michelle Harrison	Senior Designer - Kristina Gates/Truit Smith	Clerical				Red Plains	Local Liaison/Community Survey Helper	
	\$195	\$185	\$185	\$175	\$165	\$165	\$140	\$125	\$135	\$75	\$	\$	\$			
Phase 4 - Draft Master Plan & Public Meetings #4 - Alternatives Presentation																
A. Draft Master Plan Preparation																
1. Executive Summary	TO BE INCLUDED IN FINAL REPORT															
2. Introduction		1			1			2				\$25	\$628			
3. Project Planning Areas (Kivalina & K-Hill)		2			4			4				\$25	\$1,558			
3.5 Potential Growth Area		1			2			4				\$25	\$1,043			
3.6 Power Generation & Fuel Storage		1			2			4				\$25	\$1,043			
3.7 Heavy Equipment		1			2			4				\$25	\$1,043			
3.8 Public Facilities & Housing		1			2			4				\$25	\$1,043			
3.9 Roads & Infrastructure		1			2			4			\$1,000	\$25	\$2,143	\$1,000		
3.12 History of Sanitation Improvements		1			2			4				\$25	\$1,043			
3.13 Condition of Facilities		1			8			2				\$25	\$1,783			
4. Future Capital Projects, Costs & Schedules	2												\$390			
4.1 Roads, Airports & Ports		1			2			4			\$1,000	\$25	\$2,143	\$1,000		
4.2 Power Generation & Fuel Storage Facilities						2		2				\$25	\$608			
4.3 Heavy Equipment					1			4				\$25	\$693			
4.4 Community Facilities		1			2			4				\$25	\$1,043			
4.5 School & Headstart		1			2			2				\$25	\$793			
4.6 Health Clinic		1			2			2				\$25	\$793			
4.7 Commercial Facilities		1			2			2				\$25	\$793			
4.8 Residential Property/Housing		1			2			4				\$25	\$1,043			
5. Land Status		1	2		1			1	2			\$25	\$1,143			
6. Need for Projects													\$0			
6.1 Health & Safety Concerns		2			4			4				\$25	\$1,558			
6.2 Environmental Concerns		2			2			4				\$25	\$1,228			
6.3 System Growth Capacity		1			1			2				\$25	\$628			
7. Community Capacity																
7.1 Management Status		1									\$1,000	\$25	\$1,313	\$1,000		
7.2 Financial Status		1									\$1,000	\$25	\$1,313	\$1,000		
7.3 System Operation & Maintenance (O&M) Status		1						2			\$1,000	\$25	\$1,563	\$1,000		
8. Infrastructure Alternatives	4												\$780			
8.1 Description		2			16			16			\$250	\$25	\$5,313	\$250		
8.2 Design Criteria		2			4			8			\$250	\$25	\$2,333	\$250		
8.3 Conceptual Layout		2			16			24	32		\$1,000	\$25	\$11,458	\$1,000		
8.4 Unique Environmental Impacts		2			16			16				\$25	\$5,038			
8.5 Site Control		2			8			16				\$25	\$3,718			
8.6 Construction Constraints		2			8			16				\$25	\$3,718			
8.7 Impacts to Existing Infrastructure		2			8			16				\$25	\$3,718			
8.8 Cost Estimates (Capital and O&M)		4			32			24				\$25	\$9,048			
8.9 Comparson of Oper. Costs for Similar Systems		2						8				\$25	\$1,398			
8.10 Advantages and Disavantages Matrix	2	4			8			16				\$25	\$4,478			
9. Public Participation													\$0			
9.1 Methods Used to Gain Community Input		1			2			4				\$25	\$1,043			
9.2 Identification of Community Goals & Objectives		1			2			4				\$25	\$1,043			
10. Conclusions and Recommended Alternatives	TO BE INCLUDED IN FINAL REPORT															
11. Draft Master Plan Submittal	2	2			2			4		4		\$400	\$2,330			
TASK TOTAL													\$83,770			

Fee Estimate Kivalina Community Master Plan December 2019	HOURS										SUBCONSULTANTS	EXPENSES	TASK SUBTOTALS	Subconsultants															
	Senior Principal - Jeff Stanley	Principal/ Project Manager - Andrea Meeks	Principal/Senior Land Surveyor - Anthony Robinson	Senior Engineer - Steven Halcomb	Project Engineer - Will Kemp	Project Engineer - Andy Horazdovsky	Registered Staff Engineer/Surveyor	Staff Engineer - Michelle Harrison	Senior Designer - Kristina Gates/Truit Smith	Clerical				Red Plains	Local Liaison/Community Survey Helper														
	\$195	\$185	\$185	\$175	\$165	\$165	\$140	\$125	\$135	\$75	\$	\$	\$																
B. Public Meeting #4 - Alternatives Presentation (Draft Master Plan)																													
1. Meeting Preparation & Assistance		2			2			4	8			\$100	\$2,390																
2. Public Meeting Attendance & Notes		20						20		2		\$2,800	\$9,430																
3. Meeting Summary Report		2						4				\$25	\$898																
TASK TOTAL													\$12,718																
PHASE 4 TOTAL COST													\$96,488																
Phase 5 - Final Master Plan & Public Meeting #5 - Final Plan Presentation																													
A. Final Master Plan Preparation																													
1. Executive Summary & Resolution	1	4			4			16				\$25	\$3,623																
2. Introduction												\$25	\$28																
3. Project Planning Areas		1			2			4				\$25	\$1,043																
4. Future Capital Projects, Costs & Schedules		1			2			4				\$25	\$1,043																
5. Land Status		1			2			2				\$25	\$793																
6. Need for Projects		1			1			2				\$25	\$628																
7. Community Capacity		1						1			\$500	\$25	\$888	\$500															
8. Infrastructure Alternatives	2	4			8			8	16		\$1,000	\$25	\$6,738	\$1,000															
9. Public Participation								1				\$25	\$153																
10. Conclusions and Recommended Alternatives	2											\$25	\$418																
10.1 Description of Recommended Alternatives		2			4			8				\$25	\$2,058																
10.2 Capital Construction Cost Estimate		1			4			8				\$25	\$1,873																
10.3 Estimated Annual Revenues & Sources		1			1			4				\$25	\$878																
10.4 Annual Operation & Maintenance Costs		1			4			2				\$25	\$1,123																
10.5 Capital Cost (Fees) Per Home Served		1						2				\$25	\$463																
10.6 Site Control		1			1			4				\$25	\$878																
10.7 Regulatory Requirements		1			1			4				\$25	\$878																
10.8 Certification & Training Requirements		1			1			4				\$25	\$878																
10.9 Construction Phasing Plan	1	2			8			8				\$25	\$2,913																
11. Master Plan Submittal	1	2			2			4		4		\$1,000	\$2,795																
TASK TOTAL													\$30,083																
B. Public Meeting #5 - Review of Final Plan																													
1. Meeting Preparation & Assistance		2			2			4	8			\$100	\$2,390																
2. Public Meeting Attendance & Notes		20								2		\$1,400	\$5,390																
3. Meeting Summary Report		4										\$25	\$768																
TASK TOTAL													\$8,548																
PHASE 5 TOTAL COST													\$38,630																
TOTAL BASIC SERVICES															30	257	36	8	318	12	56	659	174	26	\$17,300	\$24,600	\$277,650	\$15,500	\$1,800
ANTHC to provide oversight through a separate agreement with NVK and Denali Commission																													

ID		Task Name	Duration	Start	Finish	November	December	January	February	March	April	May	June	July	August														
						M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	
1		Kivalina Community Master Plan	255 days	12/16	8/26																								
2		Notice to Proceed	1 day	12/16	12/16																								
3		Phase 1 - Data Collection, Pre-Draft Plan & Public Meeting #1	56 days	12/17	2/10																								
4		Data Collection & Pre-Draft Preparation	30 days	12/17	1/15																								
5		Public Meeting #1 Visioning Session	1 day	1/20	1/20																								
6		Pre-Draft Submittal	1 day	1/27	1/27																								
7		Review Period	14 days	1/28	2/10																								
8		Phase 2 - Community Survey, Condition Assessments & Public Meeting #2	25 days	2/3	2/27																								
9		House-to-House Survey (Site Visit & Summaries)	14 days	2/3	2/16																								
10		Existing Facilities Conditions Assessments (Desktop & Summaries)	5 days	2/3	2/7																								
11		Water, Sewer & Solid Waste Facilities	2 days	2/3	2/4																								
12		Fuel & Power Facilities	2 days	2/3	2/4																								
13		Heavy Equipment	2 days	2/3	2/4																								
14		Roads Assessment	3 days	2/3	2/5																								
15		ANTHC Data Review	1 wk	2/17	2/21																								
16		Public Meeting #2 - Community Vetting	1 day	2/27	2/27																								
17		Phase 3 - Conceptual Community Layouts & Public Meeting #3	33 days	2/28	3/31																								
18		Conceptual Community Layouts	30 days	2/28	3/28																								
19		Public Meeting #3	1 day	3/31	3/31																								
20		Phase 4 - Draft Master Plan & Public Meeting #4	66 days	4/1	6/5																								
21		Draft Master Plan	45 days	4/1	5/15																								
22		Review & Response Period	20 days	5/16	6/4																								
23		Public Meeting #4	1 day	6/5	6/5																								
24		Optional Additional Public Meeting																											
25		Phase 5 - Final Master Plan & Public Meeting #5	224 days	12/16	7/26																								
26		Final Master Plan	30 days	6/6	7/5																								
27		Review & Response Period	20 days	7/6	7/25																								
28		Public Meeting #5	1 day	7/26	7/26																								
29		Community Resolution	1 day	8/11	8/11																								
30																													
31																													
32																													